

NONVOLATILE MEMORY CAPABLE OF STORING MULTIBITS BINARY
INFORMATION AND THE METHOD OF FORMING THE SAME

ABSTRACT OF THE DISCLOSURE

A nonvolatile memory capable of storing multi-bits binary information is provided. The memory includes an oxide formed on a substrate. A control gate is formed on the oxide. An L-shape structure is attached on sidewall of the control gate. Spacers are formed on the L-shape structure to act as a floating gate. A first doped region and a second doped region is formed in the substrate adjacent to the spacers with a channel between the two doped regions. Wherein the spacer represent a first binary status by injecting and storing electrical charges in the spacers. Or to represent a second binary status by not injecting electrical charges into the spacer.